

## ABSTRACT

A method of measuring optical fiber-drawing tension, containing: measuring oscillation of an optical fiber when  
5 drawing; determining a fundamental oscillation frequency of the optical fiber based on peak frequencies contained in spectrum components of oscillation waveform; and converting the fundamental oscillation frequency into tension applied to the optical fiber being drawn; wherein  
10 the determination of the fundamental oscillation frequency is performed through specifying, as a harmonic oscillation series group, a group of peak frequencies containing at least two peak frequencies, in which an interval between zero (0) and first peak frequencies, an interval between  
15 first and second peak frequencies, ..., and an interval between (n-1)th and nth peak frequencies (where n is a natural number) are equal to each other, from among the peak frequencies in the spectrum components, to carry out the method based on the peak frequencies in the specified  
20 harmonic oscillation series group.